

Work Order ID 81623-2 Split 2/2
8:40:20 AM
March-16-12

81623

Page 1

Item ID: D4095-041
Revision ID: Wearplate Assembly
Item Name: 16/03/2012 Start Qty: 10.00
Start Date: 30/03/2012 Req'd Qty: 10.00
Required Date:

Accept

N9000040100

Setup Start *NS1*
Stop *NS2*

Cust Item ID:
Customer:

Reference: Process Plan: MLC
Approvals: QC:

Date: 12/03/12 Tooling:
Date: SPC (Y/N):

Date:
Date:

Run Start *NR1*
Stop *NR2*

Sequence ID/
Work Center ID

Draw Nbr

D4095

100

100

Waterjet

FLOW CNC Waterjet

304 .063

Operation
Description

Revision Nbr

B

FLOW WATER JET

Memo

1-Cut as per Dwg (D4095-1)

Dwg Rev: 3

Prog Rev: 3

2-Deburr if necessary

Set Up/
Run Hours

0.00

0.00

QC2- Inspect parts off machine FAI/FAIB

0.00

Memo

0.00

QC8- Inspect parts - second check

0.00

Memo

0.00

Tool ID Tool # Plan Code Accept Qty Reject Qty Reject Number Insp. Stamp

WHL/Jun 1204C (10)

WHL/Jun 120405 (12)

Debur.

(12)

Work Order ID 81623

March-16-12 8:40:20 AM

81623

Page 2

Item ID: D4095-041

Revision ID:

Item Name: Wearplate Assembly

Start Date: 16/03/2012 Start Qty: 10.00

Required Date: 30/03/2012 Req'd Qty: 10.00

Reference:

Accept

N9000040100

Setup Start *NS1*

Stop *NS2*

Cust Item ID:

Customer:

Approvals: Process Plan:

QC:

Date:

Date:

Tooling:

SPC (Y/N):

Date:

Date:

Run Start *NR1*

Stop *NR2*

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp

130

130

Brake NC

Brake NC

NC BRAKE

Memo

- 1- bend section C-C first
- 2- Form on Brake as per Dwg D4095 using Jigs DT 8179 and DT 8155
- 3- Form Joggles (2) as per Dwg D4095 on brake using Jig DT 8157

SP 01/01/10

140

140

QC

Quality Control

QC5- Inspect part completeness to step on W/O

Memo

Ensure joggle as per dwg D4095

SP 01/01/10

(x2)

150

150

Large Fab

Large Fab

Weld per dwg A/R Hardcoat S.S. Batch: *m121879*

Large Fab

Memo

(x7)

MAL

12/06/06

Work Order ID 81623

March-16-12 8:40:20 AM

81623

Page 3

Item ID: D4095-041

Revision ID:

Item Name: Wearplate Assembly

Start Date: 16/03/2012 Start Qty: 10.00

Required Date: 30/03/2012 Req'd Qty: 10.00

Reference:

Accept

N900040100

Setup Start *NS1*

Stop *NS2*

Cust Item ID:

Customer:

Approvals: Process Plan:

QC:

Date:

Date:

Tooling:

SPC (Y/N):

Date:

Date:

Run Start *NR1*

Stop *NR2*

Sequence ID/
Work Center ID

160

160

QC

Quality Control

Operation
Description

QC10- Inspect visual per QSI004- ground welds

Memo

Set Up/
Run Hours

0.00

0.00

5.2 hours

Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp

170

170

QC

Quality Control

QC5- Inspect part completeness to step on W/C

Memo

0.00

0.00

5.2 hours

(+7)

180

180

HandFinish

Hand Finishing

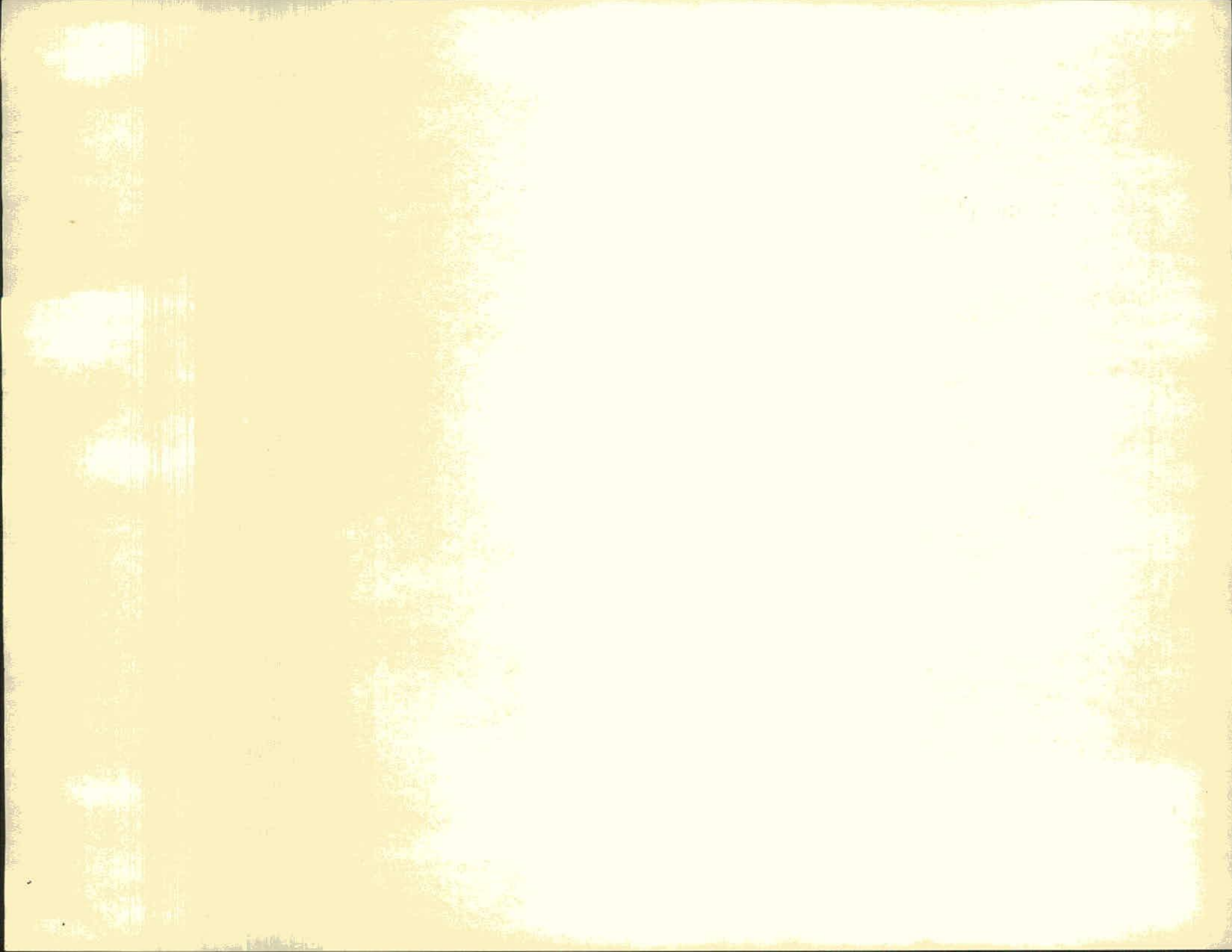
Memo

0.00

0.00

COAT ENTIRE TOP (CONCAVE) SURFACE WITH ROCKGUARD AS PER
DWG
A/R ROCKGUARD BATCH: 121352

12-6-7 (7)



Work Order ID 81623

March-16-12 8:40:20 AM

81623

Page 4

Item ID: D4095-041

Revision ID:

Item Name: Wearplate Assembly

Start Date: 16/03/2012 Start Qty: 10.00

Required Date: 30/03/2012 Req'd Qty: 10.00

Reference:

Accept

N9000040100

Setup Start *NS1*

Stop *NS2*

Cust Item ID:

Customer:

Approvals: Process Plan:

QC:

Date:

Date:

Tooling:

SPC (Y/N):

Date:

Date:

Run Start *NR1*

Stop *NR2*

Sequence ID/
Work Center ID

190

190

QC

Quality Control

Operation
Description

QC3- Inspect Part Finish

Memo

Set Up/
Run Hours

0.00

0.00

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

7, 4 H 12/06/09

200

200

Packaging

Packaging

Identify as per dwg & Stock Location EP-1

Memo

0.00

0.00

7x 4 H 12/06/09
counted measure

210

210

QC

Quality Control

QC21- Final Inspection - Work Order Release

Memo

0.00

0.00

12/6/11
mf
12-06-08

Picklist Print

March-16-12 8:40:24 AM

Page 1

Work Order ID: 81623

Parent Item: D4095-041

Parent Item Name: Wearplate Assembly

81623

D4095-041

Start Date: 16/03/2012

Required Date: 30/03/2012

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP Rev:A new issue DD 10.04.26 verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S16GA		Purchased	No			100	sf	249.9860	2.275	23.94737			
**													

M304S16GA

304/316 Sheet .063

Location

MAT020

Loc Qty

249.986

Loc Code

119653

17.35

120866

73.5

120877

159.136

Jm /
 120405
 120877 (12)

DART AEROSPACE LTD		Work Order:	81023
Description: Wearplate		Part Number:	D4095-1
Inspection Dwg: D4095	Rev: B	Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.19	+0.005/-0.001	0.190	✓		Vern	HB-02
0.300	+/-0.010	0.300	✓		Vern	HB-02
0.300	+/-0.010	0.301	✓		Vern	HB-02
2.432	+/-0.010	2.436	✓		Vern	HB-02
3.227	+/-0.010	3.224	✓		Vern	HB-02
4.06	+/-0.030	4.061	✓		Vern	HB-02
4.98	+/-0.030	4.983	✓		Vern	HB-02
8.43	+/-0.030	8.424	✓		Vern	HB-02
9.22	+/-0.030	9.231	✓		Vern	HB-02
3.500	+/-0.010	3.503	✓		Vern	PROD.-W-J-02
24.750	+/-0.010	24.750	✓		Vern	HB-02
11.50	+/-0.030	11.50	✓		Vern	HB-01
11.472	+/-0.010	11.475	✓		Vern	HB-01 Prod-W-J-02
6.000	+/-0.010	6.004	✓		Vern	Prod-W-J-02
12.104	+/-0.010	12.104	✓		Vern	Prod-W-J-02
18.000	+/-0.010	18.00	✓		MT	HB-01
30.000	+/-0.010	30.00	✓		MT	HB-01
9.00	+/-0.030	9.007	✓		MT	HB-01
36.000	+/-0.010	36.000	✓		Vern	Prod-W-J-02
38.87	+/-0.030	38.87	✓		MT	HB-01
2.50	+/-0.030	2.492	✓		MT	HB-01
0.063	+/-0.010	0.058			Vern	HB-02

Measured by: JMT/JSW	Audited by: J	Preliminary Approval:
Date: 12/01/05	Date: 12/01/05	Date:

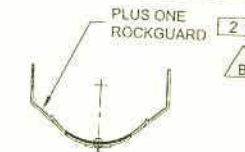
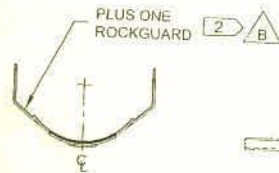
Rev	Date	Change	Revised by	Approved
A	11.02.18	New Issue P/O D4095-041	KJ	
B	11.11.08	Dimensions updated per Dwg Rev B	KJ	

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 816-23,405
10/26/10

ITEM	QTY	QTY	QTY	QTY	QTY	QTY	PART NUMBER	DESCRIPTION
1	X						D4095-041	WEARPLATE ASSEMBLY
2		X					D4095-043	WEARPLATE ASSEMBLY
3			X				D4095-045	WEARPLATE ASSEMBLY
4				X			D4095-047	WEARPAD ASSEMBLY
5					X		D4095-049	WEARPAD ASSEMBLY
6						X	D4095-051	WEARPAD ASSEMBLY
7	1						D4095-1	WEARPLATE
8		1					D4095-3	WEARPLATE
9			1				D4095-5	WEARPLATE
10				1			D4095-7	WEARPAD
11					1		D4095-9	WEARPAD
12						1	D4095-11	WEARPAD
13	A/R	A/R	A/R	A/R	A/R	A/R	4715 (4714)	PLUS ONE ROCKGUARD BLACK (TAN)



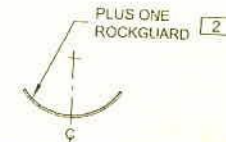
D4095-041 WEARPLATE ASSEMBLY



D4095-043 WEARPLATE ASSEMBLY



D4095-045 WEARPLATE ASSEMBLY



RECEIVED
2011-10-31
W

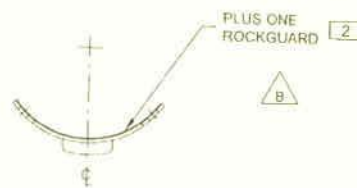
D4095-041/-043/-045/-047/-049/-051 NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: COAT ENTIRE TOP (CONCAVE) SURFACE WITH PLUS ONE ROCKGUARD 4714 OR 4715, 0.02-0.04 THICK
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4095-0XX" AND B/N "BXXXXX" USING REMOVABLE TAG PER QSI 044 6.6
- 7) WEIGHT: D4095-041 = 3.08 lbs; D4095-043 = 3.08 lbs; D4095-045 = 2.00 lbs; D4095-047 = 0.48 lbs; D4095-049 = 0.42 lbs; D4095-051 = 0.37 lbs
- 8) PARTS ARE SYMMETRIC ABOUT C

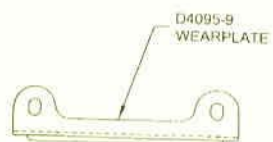
B	REVISED D4095-1/-1F/3/3F; 4715 PLUS ONE ROCKGUARD REPLACES D4095-1/-3; ADDED D4095-5/-7/-9/-11; REVISED HARDCOAT DESIGN; REVISED NOTE 2	XDF	11.10.18
A	NEW ISSUE	MB	10.04.20
REV.	DESIGN	BY	DATE
DRAWN	XDF	DART AEROSPACE USA, INC KENT, WA	
CHECKED	AP	DRAWING NO.	REV. B
MFG. APPR.	AP	D4095	SHEET 1 OF 8
APPROVED	AP	TITLE	SCALE
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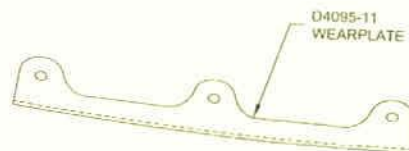
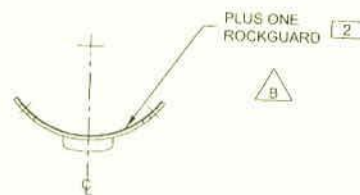
D4095-047 WEAR PAD ASSEMBLY



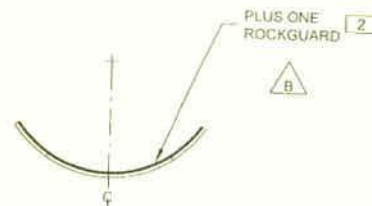
gle 23



D4095-049 WEAR PAD ASSEMBLY

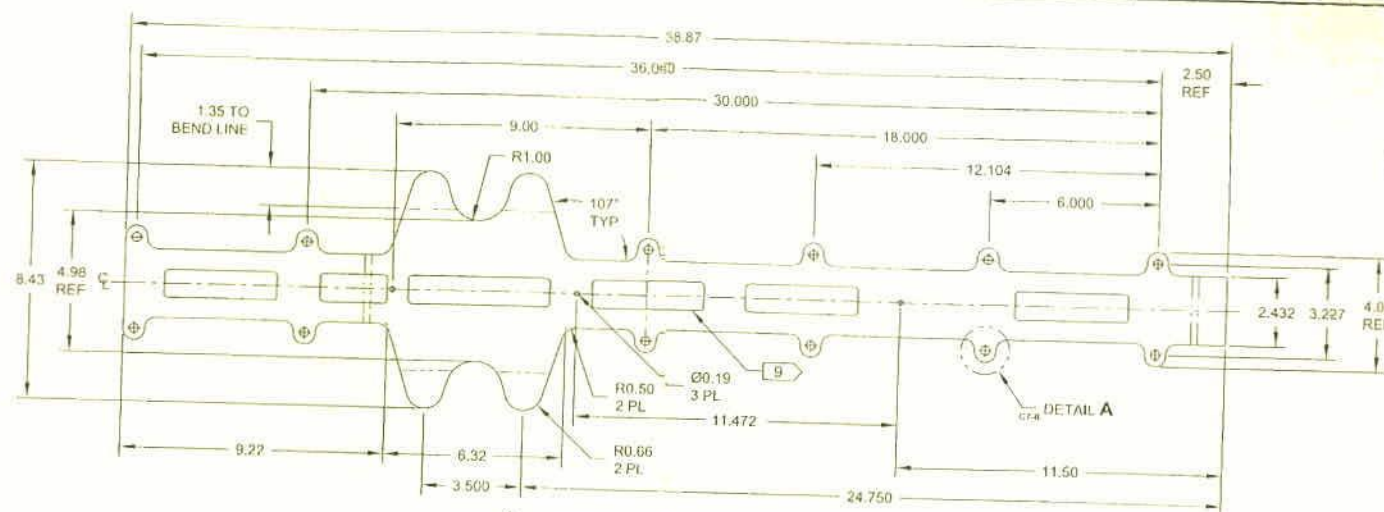


D4095-051 WEARPAD ASSEMBLY

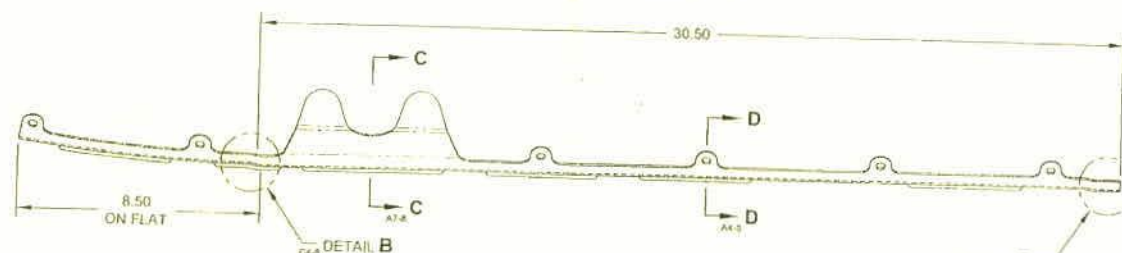


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D4095-1F FLAT PATTERN



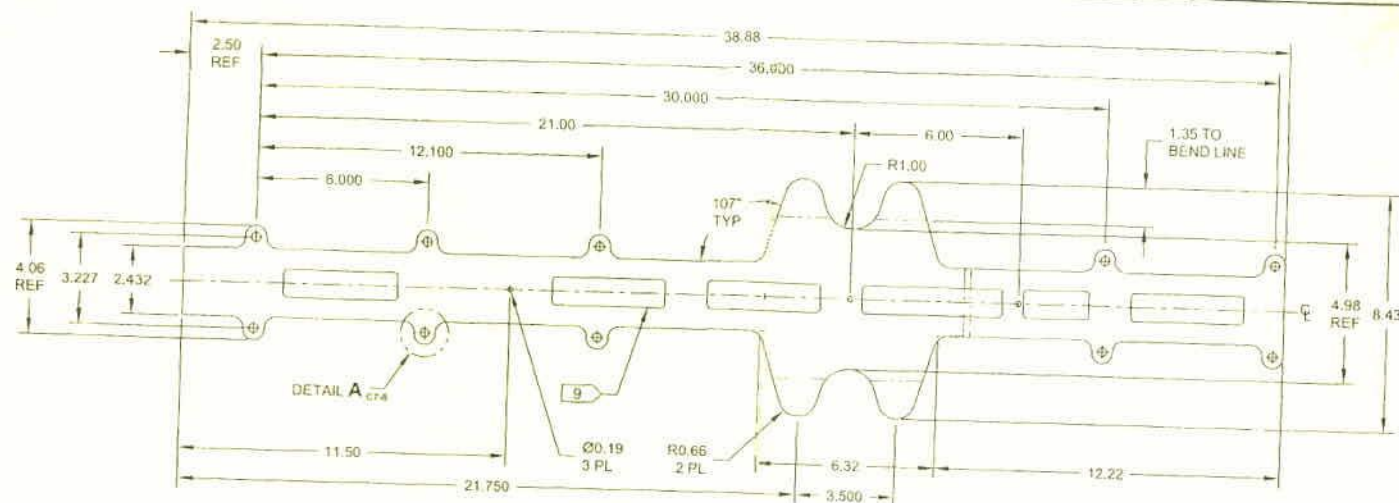
D4095-1 BENDING DETAIL
(MAKE FROM D4095-1F)

D4095-1/-1F/-3/-3F/-5/-5F/-7/-7F/-9/-9F/-11/-11F NOTES:

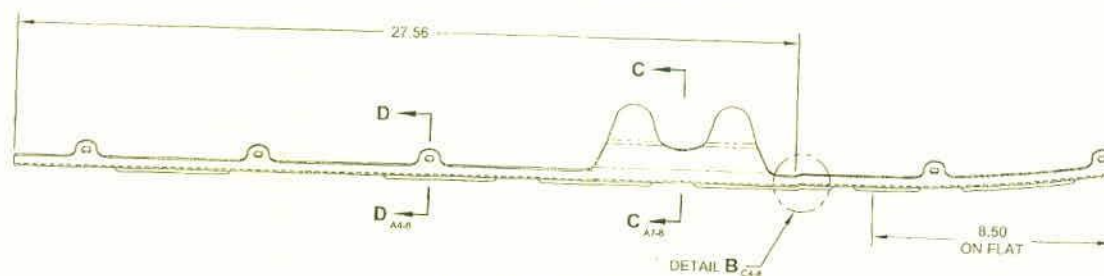
- 1) MATERIAL: AISI 304/316 SS SHEET ANNEALED 2B FINISH, 16 GAUGE (0.063 THICK)
PER AMS 5513 (304) OR AMS 5524 (316), OR ASTM A240 OR ASME SA240
REF DART MATERIAL SPEC M304S16GA
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.015 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: D4095-1 = 3.00 lbs; D4095-3 = 3.00 lbs; 4095-5 = 1.96 lbs; D4095-7 = 0.47 lbs; D4095-9 = 0.41 lbs; D4095-13 = 0.36 lbs
- 8) WELDING: PER DART QSI 004
- 9) PARTS ARE SYMMETRIC ABOUT C

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CHECKED	140	DRAWING NO. REV. B
MFG. APPR.	140	D4095 SHEET 3 OF 8
APPROVED	140	TITLE SCALE
DE APPR.	140	WEARPLATE NTS
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D4095-3F FLAT PATTERN 1



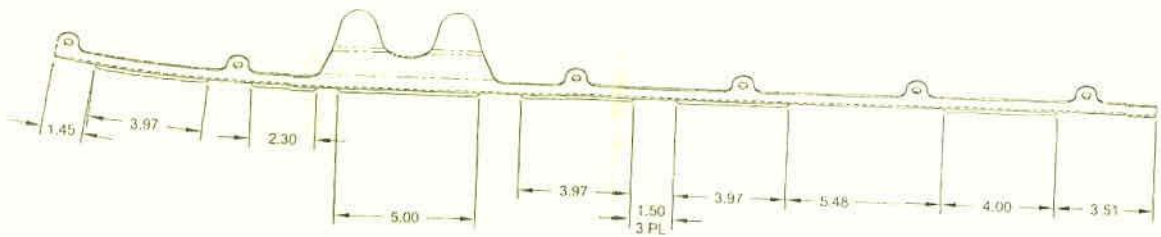
D4095-3 BENDING DETAIL
(MAKE FROM D4095-3F)

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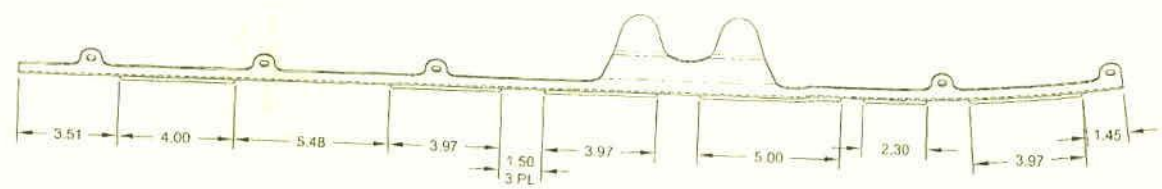
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g/k 23



D4095-1 WELDING DETAIL 



D4095-3 WELDING DETAIL 

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MFG. APPR		D4095	SHEET 5 OF 6
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

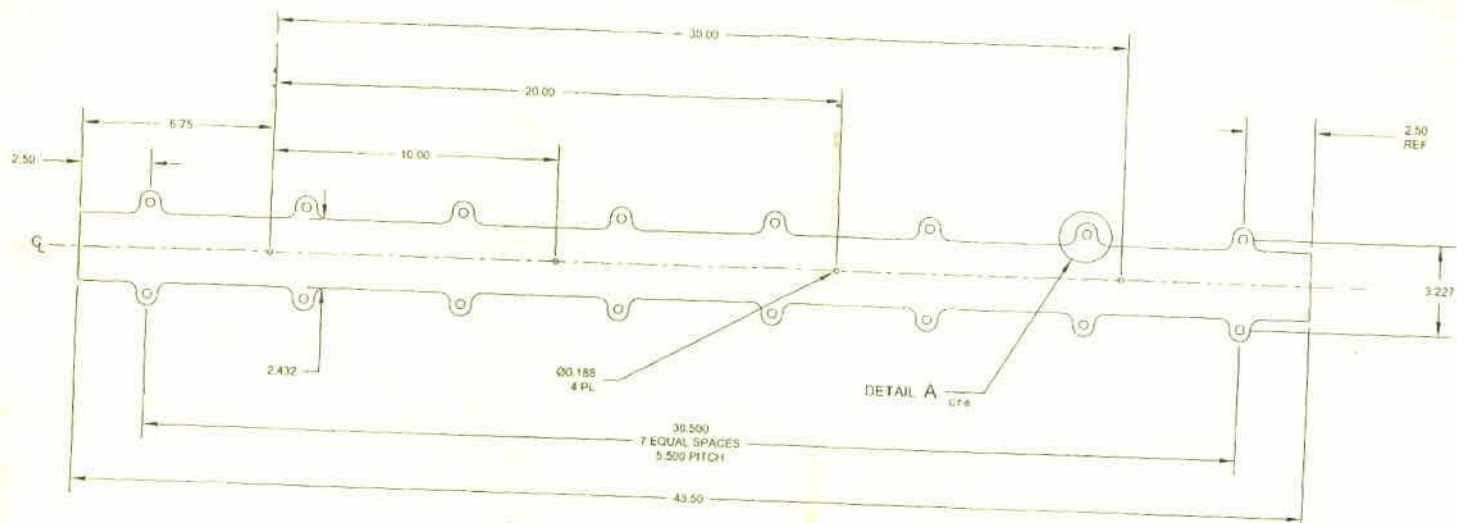
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

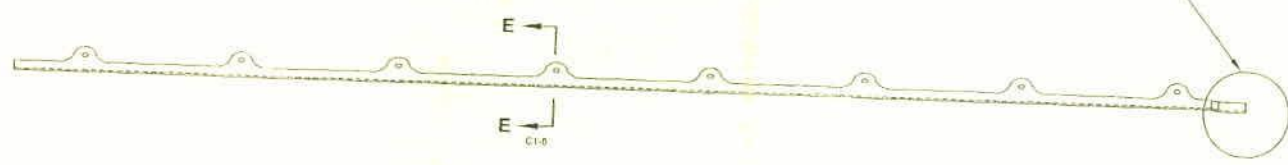
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

01023



D4095-5F FLAT PATTERN



D4095-5 BENDING DETAIL
(MAKE FROM D4095-5F)

REV. B
2011-10-31
ND

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DRAWN	XDF	KENT, WA	
CHECKED	10	DRAWING NO.	REV. B
MFG. APPR.	10	D4095	SHEET 5 OF 8
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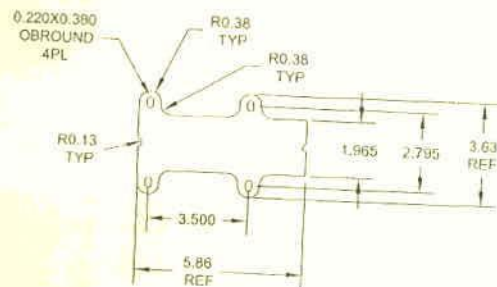
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

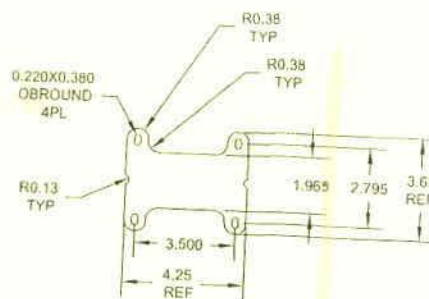
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

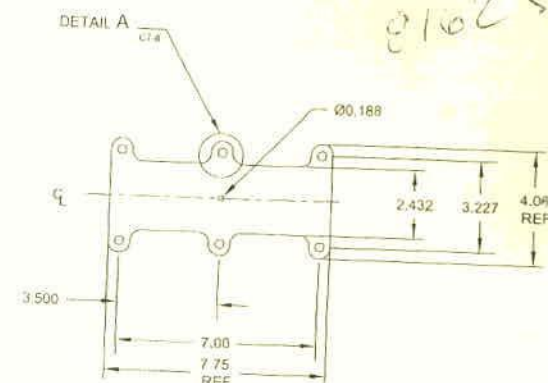
NOTE: Date & initial all entries



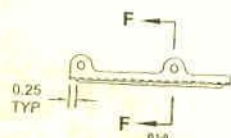
D4095-7F FLAT PATTERN



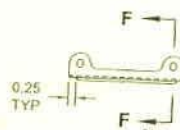
D4095-9F FLAT PATTERN



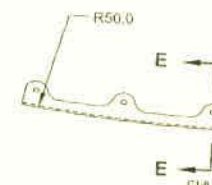
D4095-11F FLAT PATTERN



D4095-7 LONGITUDINAL BEND
(MADE FROM D4095-7F)



D4095-9 LONGITUDINAL BEND
(MADE FROM D4095-9F)



D4095-11 BENDING DETAIL
(MAKE FROM D4095-11F)

DESIGN		DART AEROSPACE USA, INC	
DRAWN	XDF	KENT, WA	
CHECKED	AD	DRAWING NO.	REV. B
MFG. APPR.	AD	D4095	SHEET 7 OF 8
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DE APPR	AD	WEARPLATE	NTS
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2011-10-31

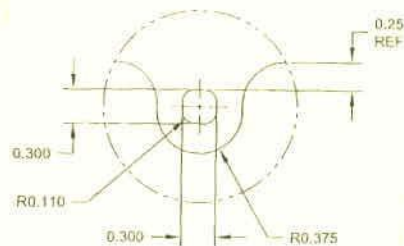
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

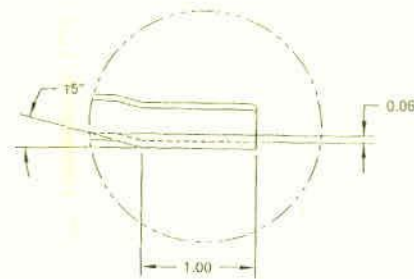
NOTE: Date & initial all entries



DETAIL A: TAB DETAIL

SCALE 4X

C3-3
C6-4
D3-4
D2-7



DETAIL B: JOGGLE DETAIL

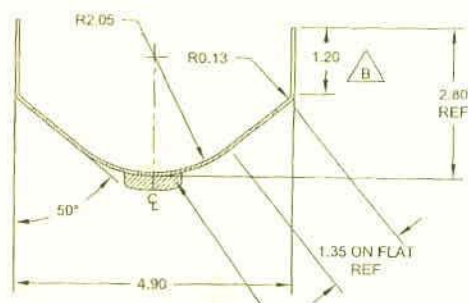
SCALE 4X

B2-3
B6-3
B3-4
B2-4



SECTION E-E

SCALE 2X B5-6
B2-7

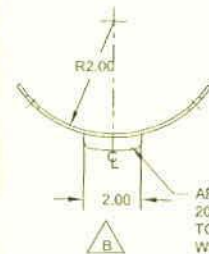


SECTION C-C

SCALE 2X

B5-3
B4-4

APPLY 2 LAYERS OF
2059B HARDCOAT WELDS
TO WITHIN 0.25 OF
WEARPAD ENDS
0.188 TO 0.250 THICK

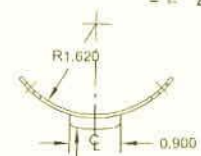


SECTION D-D

SCALE 2X

B4-3
B5-4

APPLY 2 LAYERS OF
2059B HARDCOAT WELDS
TO WITHIN 0.25 OF
WEARPAD ENDS
0.188 TO 0.250 THICK



SECTION F-F

SCALE 2X B5-7
B7-7

APPLY 2 LAYERS OF
2059B HARDCOAT WELDS
TO WITHIN 0.25 OF
WEARPAD ENDS
0.188 TO 0.250 THICK

RELEASED
2011-10-3
NP

DESIGN		DART AEROSPACE USA, INC
DRAWN	XDF	KENT, WA
CHECKED	140	DRAWING NO. REV. B
MFG. APPR.	140	D4095 SHEET 8 OF 8
APPROVED	140	TITLE SCALE
DE APPR.	140	WEARPLATE NTS
DATE	11.10.18	

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries